RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/516,813A
Source: IFWP
Date Processed by STIC: 07/05/2006

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IFWP

RAW SEQUENCE LISTING DATE: 07/05/2006
PATENT APPLICATION: **US/10/516,813A** TIME: 13:49:52

Input Set : **A:\11752-007US1.txt**
Output Set: **N:\CRF4\07052006\J516813A.raw**

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 5 <110> APPLICANT: FRASER, JOHN D.
 8 <120> TITLE OF INVENTION: IMMUNOMODULATORY CONSTRUCTS AND THEIR USES
11 <130> FILE REFERENCE: 11752-007US1
14 <140> CURRENT APPLICATION NUMBER: US 10/516,813A
15 <141> CURRENT FILING DATE: 2004-12-03
18 <150> PRIOR APPLICATION NUMBER: NZ 519371
19 <151> PRIOR FILING DATE: 2002-06-04
21 <150> PRIOR APPLICATION NUMBER: PCT/NZ03/00111
22 <151> PRIOR FILING DATE: 2003-06-04
25 <160> NUMBER OF SEQ ID NOS: 13
28 <170> SOFTWARE: PatentIn version 3.1
31 <210> SEQ ID NO: 1
32 <211> LENGTH: 209
33 <212> TYPE: PRT
34 <213> ORGANISM: Streptococcus pyogenes
37 <400> SEQUENCE: 1
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40 1               5                  10                  15
43 Val Tyr Glu Tyr Ser Asp Ile Val Ile Asp Phe Lys Thr Ser His Asn
44             20                  25                  30
47 Leu Val Thr Lys Lys Leu Asp Val Arg Asp Ala Arg Asp Phe Phe Ile
48         35                  40                  45
51 Asn Ser Glu Met Asp Glu Tyr Ala Ala Asn Asp Phe Lys Thr Gly Asp
52     50                  55                  60
55 Lys Ile Ala Val Phe Ser Val Pro Phe Asp Trp Asn Tyr Leu Ser Lys
56 65                  70                  75                  80
59 Gly Lys Val Thr Ala Tyr Thr Tyr Gly Gly Ile Thr Pro Tyr Gln Lys
60                 85                  90                  95
63 Thr Ser Ile Pro Lys Asn Ile Pro Val Asn Leu Trp Ile Asn Gly Lys
64             100                 105                 110
67 Gln Ile Ser Val Pro Tyr Asn Glu Ile Ser Thr Asn Lys Thr Thr Val
68         115                 120                 125
71 Thr Ala Gln Glu Ile Asp Leu Lys Val Arg Lys Phe Leu Ile Ala Gln
72     130                 135                 140
75 His Gln Leu Tyr Ser Ser Gly Ser Ser Tyr Lys Ser Gly Arg Leu Val
76 145                 150                 155                 160
79 Phe His Thr Asn Asp Asn Ser Asp Lys Tyr Ser Phe Asp Leu Phe Tyr
80                 165                 170                 175
83 Val Gly Tyr Arg Asp Lys Glu Ser Ile Phe Lys Val Tyr Lys Asp Asn
84             180                 185                 190
87 Lys Ser Phe Asn Ile Asp Lys Ile Gly His Leu Asp Ile Glu Ile Asp
88         195                 200                 205
91 Ser
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98 <213> ORGANISM: Streptococcus pyogenes
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104 1 5 10 15
107 Val Tyr Glu Tyr Ser Asp Ile Val Ile Asp Phe Lys Thr Ser His Cys
108 20 25 30
111 Leu Val Thr Lys Lys Leu Asp Val Arg Asp Ala Arg Asp Phe Phe Ile
112 35 40 45
115 Asn Ser Glu Met Asp Glu Tyr Ala Ala Asn Asp Phe Lys Thr Gly Asp
116 50 55 60
119 Lys Ile Ala Val Phe Ser Val Pro Phe Asp Trp Asn Tyr Leu Ser Lys
120 65 70 75 80
123 Gly Lys Val Thr Ala Tyr Thr Tyr Gly Gly Ile Thr Pro Tyr Gln Lys
124 85 90 95
127 Thr Ser Ile Pro Lys Asn Ile Pro Val Asn Leu Trp Ile Asn Gly Lys
128 100 105 110
131 Gln Ile Ser Val Pro Tyr Asn Glu Ile Ser Thr Asn Lys Thr Thr Val
132 115 120 125
135 Thr Ala Gln Glu Ile Asp Leu Lys Val Arg Lys Phe Leu Ile Ala Gln
136 130 135 140
139 His Gln Leu Tyr Ser Ser Gly Ser Ser Tyr Lys Ser Gly Arg Leu Val
140 145 150 155 160
143 Phe His Thr Asn Asp Asn Ser Asp Lys Tyr Ser Phe Asp Leu Leu Tyr
144 165 170 175
147 Val Gly Tyr Arg Asp Gln Glu Ser Ile Phe Lys Val Tyr Lys Asp Asn
148 180 185 190
151 Lys Ser Phe Asn Ile Asp Lys Ile Gly His Leu Asp Ile Glu Ile Asp
152 195 200 205
155 Ser
159 <210> SEQ ID NO: 3
160 <211> LENGTH: 209
161 <212> TYPE: PRT
162 <213> ORGANISM: Streptococcus pyogenes
165 <400> SEQUENCE: 3
167 Leu Glu Val Asp Asn Asn Ser Leu Leu Arg Asn Ile Tyr Ser Thr Ile
168 1 5 10 15
171 Val Ala Glu Tyr Ser Asp Ile Val Ile Asp Phe Lys Thr Ser His Cys
172 20 25 30
175 Leu Val Thr Lys Lys Leu Asp Val Arg Asp Ala Arg Asp Phe Phe Ile
176 35 40 45
179 Asn Ser Glu Met Asp Glu Tyr Ala Ala Asn Asp Phe Lys Thr Gly Asp
180 50 55 60
183 Lys Ile Ala Val Phe Ser Val Pro Phe Asp Trp Asn Tyr Leu Ser Lys
184 65 70 75 80
187 Gly Lys Val Thr Ala Tyr Thr Tyr Gly Gly Ile Thr Pro Tyr Gln Lys
188 85 90 95

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191 Thr Ser Ile Pro Lys Asn Ile Pro Val Asn Leu Trp Ile Asn Gly Lys
192             100                 105                 110
195 Gln Ile Ser Val Pro Tyr Asn Glu Ile Ser Thr Asn Lys Thr Thr Val
196         115                 120                 125
199 Thr Ala Gln Glu Ile Asp Leu Lys Val Arg Lys Phe Leu Ile Ala Gln
200     130                 135                 140
203 His Gln Leu Tyr Ser Ser Gly Ser Ser Tyr Lys Ser Gly Arg Leu Val
204 145                 150                 155                 160
207 Phe His Thr Asn Asp Asn Ser Asp Lys Tyr Ser Phe Asp Leu Leu Tyr
208                 165                 170                 175
211 Val Gly Tyr Arg Asp Gln Glu Ser Ile Phe Lys Val Tyr Lys Asp Asn
212             180                 185                 190
215 Lys Ser Phe Asn Ile Asp Lys Ile Gly His Leu Asp Ile Glu Ile Asp
216         195                 200                 205
219 Ser
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224 <211> LENGTH: 27
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Primer
233 <400> SEQUENCE: 4
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239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Primer
246 <400> SEQUENCE: 5
247 gaatattcag ctacaatcgt actatag                                    27
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251 <211> LENGTH: 24
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Primer
259 <220> FEATURE:
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262 <400> SEQUENCE: 6
263 gatgttagat gtgctagaga tttc                                       24
266 <210> SEQ ID NO: 7
267 <211> LENGTH: 26
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial sequence
272 <220> FEATURE:
273 <223> OTHER INFORMATION: Primer
275 <400> SEQUENCE: 7
276 ctctagcaca tctaacatca agtttc                                     26
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Input Set : A:\11752-007US1.txt
Output Set: N:\CRF4\07052006\J516813A.raw

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280 <211> LENGTH: 23
281 <212> TYPE: DNA
282 <213> ORGANISM: Artificial sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: Primer
288 <400> SEQUENCE: 8
289 ccatttgatt tgaactattt atc 23
292 <210> SEQ ID NO: 9
293 <211> LENGTH: 23
294 <212> TYPE: DNA
295 <213> ORGANISM: Artificial sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Primer
301 <400> SEQUENCE: 9
302 gataaatagt tcaaatcaaa tgg 23
305 <210> SEQ ID NO: 10
306 <211> LENGTH: 23
307 <212> TYPE: DNA
308 <213> ORGANISM: Artificial sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: Primer
314 <400> SEQUENCE: 10
315 gatatagaga tcaagaaagt atc 23
318 <210> SEQ ID NO: 11
319 <211> LENGTH: 23
320 <212> TYPE: DNA
321 <213> ORGANISM: Artificial sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: Primer
327 <400> SEQUENCE: 11
328 gatactttct tgatctctat atc 23
331 <210> SEQ ID NO: 12
332 <211> LENGTH: 18
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial sequence
337 <220> FEATURE:
338 <223> OTHER INFORMATION: Primer
340 <400> SEQUENCE: 12
341 accatcctcc aaaatcgg 18
344 <210> SEQ ID NO: 13
345 <211> LENGTH: 18
346 <212> TYPE: DNA
347 <213> ORGANISM: Artificial sequence
350 <220> FEATURE:
351 <223> OTHER INFORMATION: Primer
353 <400> SEQUENCE: 13
354 tcagaggttt tcaccgtc 18

VERIFICATION SUMMARY DATE: 07/05/2006
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